

LISTING OF CLAIMS

We claim:

1. (currently amended) An apparatus comprising:

a buffer for storing indications of interrupts generated by ports of a peripheral device, the peripheral device having a plurality of ports, said apparatus for transferring interrupts from the peripheral device to a host computer system, and

a controller for, in response to a preset condition being met, generating a control data block comprising a payload portion having a plurality of fields each corresponding to a ~~different one of the ports~~ port and a header portion having an identifier for identifying the control data block, moving the contents of the buffer to ~~the corresponding fields of~~ the payload portion, and sending the control data block to the host computer system via one of the ports.
moving the contents of the buffer to the payload portion of the control data block.

2. (original) An apparatus as claimed in claim 1, wherein the preset condition comprises a determination that the buffer is full.

3. (original) An apparatus as claimed in claim 1, wherein the preset condition comprises a determination that at least a predetermined plurality of indications is stored in the buffer and that a predetermined period has elapsed.

4. (original) An apparatus as claimed in claim 1, wherein the preset condition comprises a determination that at least one indication is stored in the buffer and that a predetermined period has elapsed.

5. (currently amended) An apparatus as claimed in claim 1, wherein the header portion ~~having~~ comprises a count indicative of the number of indications included in the payload portion.

1 6. (original) An apparatus as claimed in claim 1, wherein the header portion comprises a time of
2 day stamp.

3 7. (original) An apparatus as claimed in claim 1, wherein the buffer comprises a first in - first
4 out memory buffer.

5 8. (original) A peripheral device comprising apparatus as claimed in claim 1.

6 9. (original) A data communications network interface comprising a peripheral device as claimed
7 in claim 8.

8 10. (currently amended) An apparatus as claimed in claim 1, further ~~A data processing system~~
9 comprising:

10 a host processing system having a memory, a data communications interface for communicating
11 data between the host computer system and a data communications network, ~~and~~
12 ~~apparatus as claimed in claim 1,~~ forming a data processing system for controlling flow of
13 interrupts from the data communication interface to the memory of the host computer system.

14 11. (original) A method comprising transferring interrupts from a peripheral device to a host
15 computer system, the peripheral device having a plurality of ports, the step of transferring
16 interrupts comprising:

17 storing interrupts generated by ports of the peripheral device in a buffer;

18 determining if a preset condition is met, and, in response to the preset condition being met;

19 generating a control data block comprising a payload portion having a plurality of fields each
20 corresponding to a different one of the ports and a header portion having an identifier for
21 identifying the control data block;

1 moving the contents of the buffer to the corresponding fields of the payload portion; and

2 sending the control data block to the host computer system via one of the ports.

3 12. (original) A method as claimed in claim 11, wherein the step of determining if the preset
4 condition is met comprises determining if the buffer is full.

5 13. (original) A method as claimed in claim 11, wherein the step of determining if the preset
6 condition is met comprises determining if at least a predetermined plurality of indications is
7 stored in the buffer and if a predetermined period has elapsed.

8 14. (original) A method as claimed in claim 11, wherein the step of determining if the preset
9 condition is met comprises determining if at least one indication is stored in the buffer
10 and if a predetermined period has elapsed.

11 15. (original) A method as claimed in claim 11, wherein the header portion comprises a count
12 indicative of the number of indications included in the payload portion.

13 16. (original) A method as claimed in claim 11, wherein the buffer comprises a first in - first out
14 memory buffer.

15 17. (currently amended) A computer program product comprising a computer usable medium
16 having computer readable program code means embodied therein for causing transfer of
17 interrupts, the computer readable program code means in said computer program product
18 comprising computer readable program code means for causing a computer to effect the
19 functions and all the limitations of claim 1.

20 18. (currently amended) A computer program product comprising a computer usable medium
21 having computer readable program code means embodied therein for causing data processing, the
22 computer readable program code means in said computer program product comprising computer

1 readable program code means for causing a computer to effect the functions and all the
2 limitations of claim 10.

3 19. (currently amended) An article of manufacture comprising a computer usable medium having
4 computer readable program code means embodied therein for causing transfer of interrupts, the
5 computer readable program code means in said article of manufacture comprising computer
6 readable program code means for causing a computer to effect the steps and all the limitations of
7 claim 11.

8 20. (currently amended) A program storage device readable by machine, tangibly embodying a
9 program of instructions executable by the machine to perform method steps for transferring
10 interrupts, said method steps comprising the steps and all the limitations of claim 11.
11